

Please type a plus sign (+) inside this box -> +

Substitute for form 1449A/PTO

MAY

FORMATION DISCLOSURE

TATEMENT BY APPLICANT

(use as many sheets as necessary)

of

PTO/SB/08A (08-00) Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Complete if Known **Application Number** 10/083.781 **Filing Date** February 25, 2002 First Named Inventor Michael J. Zaworotko **Group Art Unit** 4645 **Examiner Name** Nutter **Attorney Docket Number** USF-104XC1

				U.S. PATENT DOCUMEN	TC	
Examiner	Cite	U.S. Patent Doci	ument	Name of Patentee or Applicant		
Initials*	No. ¹	Number K	ind Code ² (if known)	of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
~	U1	6,180,024	B1	Blackwood et al.	01-30-2001	
~	U2	6,187,440	B1	Wu	02-13-2001	All
	U3				02-13-2001	— All
	U4					
	U5		1 1		L	
	U6					
	U7		1 1		—————————————————————————————————————	MAY
	U8		1			20 (1)
	U9		1			Con Zan
	U10		1 			11/50
	U11		+ +			160/2900
	U12		+			0/200
	U13		+ +			900
	U14		++			
	U15		 			
	U16		 			
	U17		1 - 			

	T	1	amina Data AD	FOF	REIGN	PATENT DOCMENT			-
Examiner Initials*	Cite No. ¹	Office ³	oreign Patent Docur Number ⁴	Kind Code ⁵ (if known)		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant	T
	F1.							Figures Appear	₽
	F2								╄
	F3								L
	F4								L
	F5								L
	F6								L
	F7								
	F8								
	F9								
	F10	19/1	11		1				
xaminer Signature		Da		1	41	uth	Date Considered	10-14	_

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the Burden Hour Statement: This form is esumated to take 2.0 nours to complete. Time will vary depending upon the needs of the individual case. Any comments of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Copied from PC14R10083/8 on 10-03-2004

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if



Please type a plus sign (+) inside this box -> +

PTO/SB/08B (08-00) Approved for use through 10/31/2002. OMB 0851-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of Information unless it contains a valid OMB control number Complete if Known substitute for form 1449B/PTO THE VED TOOL SOON Applicati n Number 10/083,781 **IMFORMATION DISCLOSURE Filing Date** February 25, 2002 TATEMENT BY APPLICANT First Named Inv ntor Michael J. Zaworotko **Group Art Unit** 1645 (use as many sheets as necessary) **Examiner Name** of 2 **Attorney Docket Number** USF-104XC1 NON PATENT LITERATURE DOCUMENTS include name of the author (in CAPITAL LETTERS), title of the article, (when appropriate), title of the Examiner Cite item (book, magazine, journal, serial, symposlum, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. Initials* No. ABOURAHMA, H. et al. "Hydroxylated nanoballs: synthesis, crystal structure, solubility and crystallization on surfaces" Chem. Commun., 2001, 2380-2381. R1 BOURNE, S.A. et al. "Self-assembly of nanometer-scale secondary building units into an undulating twodimensional network with two types of hydrophobic cavity" Angew. Chem. Int. Ed., June 2001, 40(11):2111-2113. R2 JOTHAM, R.W. et al. "Antiferromagnetism in transition-metal complexes. Part IV. Low-lying excited states of binuclear copper (II) carboxylate complexes" Dalton Trans., 1972, pp. 428-438. ~ R3 KATO, M. et al. "Copper(II) complexes with subnormal magnetic moments" Chem. Rev., 1964, 64(2):99-128. R4 LU, J. et al. "Polygons and faceted polyhedra and nanoporous networks" Angew. Chem. Int. Ed., 2001, 40(11):2113-2116. **R5** MOULTON, B. et al. "Nanoballs: nanoscale faceted polyhedra with large windows and cavities" Chem. Commun., 2001, 863-864. R6 MOULTON, B. and M. ZAWOROTKO "From molecules to crystal engineering: supramolecular isomerism and polymorphism in network solids" Chem. Rev., June 2001, 101(6):1629-1658. R7 SUN, S.H. et al. "Monodisperse FePt Nanoparticles and Ferromagnetic FePt Nanocrystal Superlattices" Science, March 17, 2000, 287:1989-1992. R8 TAMURA, H. et al. "Semiconductor Ferromagnetism in Quantum Dot Array" Phys. Status Solidi B., March 19, 2001, 224(3):723-725. R9 YAGHI, O.M. et al. "Synthetic strategies, structure patterns, and emerging properties in the chemistry of modular porous solids" Acc. Chem. Res., 1998, 31(8):474-484. R10 ZHANG, X.X. et al. "Cooperative magnetic behavior in the coordination polymers [Cu₃(TMA)₂L₃] (L = H_2O , pyridine)" J. Appl. Phys., May 1, 2000, 87(9):6007-6009. R11 **R12 R13**

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Examiner

Signature

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending on the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Date

Considered

¹ Unique citation designation number. 2 Applicant is to place a check mark here if English language Translation is attached.

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Approved for use through 10/31/2002. OMB 0651-0031 Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of Information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO 外NFORMATION DISCLOSURE 野TATEMENT BY APPLICANT

(use as many sheets as necessary)

of

Coi	mplete if Known
Application Number	10/083,781
Filing Date	February 25, 2002
First Named Inventor	Michael J. Zaworotka
Group Art Unit	1845 174 29
Examiner Name	Nu Har
Attorney Docket Number	USF-104XC1

Considered

				U.S. PATENT DOCUMEN	TS	
Examiner Initials*	Cite No. 1	U.S. Patent Doc Number	ument (ind Code ² (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant
M	U1	5,648,508		Yaghi	07-15-1997	Figures Appear
ns	U2	4,880,761		Bedard et el.	08-14-1989	All
m	U3	4,500,651		Lok et al.	02-19-1985	All
w	U4	4,454,153		Lowicki et al.	06-12-1984	All Ali
~	U5	4,440,871		Lok et al.	04-03-1984	All
~~	U6	4,310,440		Wilson et al.	01-12-1982	All
	U7					All
	U8					
	U9					
	U10					
	U11					
	U12					
	U13					
	U14		\top			
	U15					
	U16					
	U17					

		, 			FOREIGN	PATENT DOCMENT	S		
Examiner Initials*	Cite No. ¹	Foreign Patent Document K Office 3 Number4 (i		Kind Code ⁵ (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant	T	
W	F1	wo	99/05	151	A1	Kepert et al.	02-04-1999	Figures Appear	+1
	F2		_				02-04-1333	All	╀
	F3								╀
	F4								Ļ
	F5								L
	F6								L
	F7								L
	F8			·					L
	F9	П							L
	F10		0	, 1	- 	,			L
			1-11						L.
xaminer Signature		/ \	aVV	1/	111	ulls	Date	9-04	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Dianas			(
		s sign (+) inside this			Approve	PTO/SB/08E of for use through 10/31/2002. OMB 06	- ,	
Undert	he Papei	work Reduction Act	of 1995, no pe	rsons are required to	U.S. Patent and Trademai	to for use through 10/31/2002. OMB 06 to Office: U.S. DEPARTMENT OF COM unless it contains a valid OMB control	MERCE	
= 0010;	Substitu	te for form 1449B/PT	· ^		- This act	unless it contains a valid OMB control	number.	
	INFO	RMATION (JISCI O	CUDE	Application Number	10/083,783		7
ALL .	CAA.	CEMENT DV		SUKE	Filing Date	10/083,/83	ĐE	╌┸
12	SA.	TEMENT BY	APPLI	CANT	First Named Inventor	February 20 2002	HE	CE
•	A (u	se as many sheets	2 20 700000	and	Group Art Unit	Michael J. Zaweroko		
		as many ancom	9 43 110CB336	uy)	Examiner Name	1645 UCT	·不	1 1 8
A TOPO	<u>It</u>	2	of	2	Attorney Docket Number	1105		
						USF/1/4XC1, <00/7F	'H CL	NTFR
		la se	NC	N PATENT LITE	RATURE DOCUMENTS	USFA(4XC1, 2007F)		7
xaminer nitials*	Cite	item (t	de name of ()	ne author (in CAPIT)	AL LETTERS), title of the article, (r			-{
muais"	No. 1			nublisher	city and/as asserted that, uate, pag	e(s), volume-issue number(s).	T2	:
. 7		BOURNE, S.A	. et al. "1-[coordination poly	mers containing henzecodies	1. oxylate" Crystal Engineering, 200	<u></u>	Ĺ
~	D4	4:25-36.		, ,	melo containing benzenedicarb	oxylate" Crystal Engineering, 200	1,	7
	R1	CHUI S at at	9A Ob					
ا/ ہ		1999, 283:114	. "A Chemic 8-1150	ally Functionalizab	le Nanoporous Material [Cu₃(TM	A) ₂ (H ₂ O) ₃] _n * Science, February 19		
	R2							1
. 1	,	YAGHI, O.M. e	t al. "Crysta	Growth of Extend	ed Solids by Nanaguagua S. I.S.	iffusion" Chem. Mater., 1997, 1074		1
	-	1076.	•		ca collas by Nollaqueous Gel D	iffusion" Chem. Mater., 1997, 1074	-	ν,
	R3	POUDNE CA					1	
أمهره		rectangular cod	N. <i>et al.</i> "C	oexisting covalent	and noncovalent nets: parall	el interpenetration of a puckere		-
	R4				Olieni. Com	nun., 2001, 9:861-862.	- 1	1
.]		WU, C-D, et a	. "Hydrothe	mal synthesis of t		ners with mixed ligands" Inorgania		
1	R5	Chemistry Com	munications	, 2001, 4:561-564.	me nen zine cooldination polyr	ners with mixed ligands" Inorgania	٥	1
	- RO	SHI O at at a	Calmilla					j
1		chain structures	Solvotnerma " Polvhedm	al syntheses and c n, 2001, 20:3287-3	crystal structures of two metal c	coordination polymers with double	-	l
	R6			. 0			1 1	
		PLATER, M.J.	et al. "Synth	esis and character	rization of notymeric management	and zinc 5-hydroxyisophthalates		
an	R7	Polyhedron, 200	01, 20:2293-	2303.	. Polymene manyanese	ariu zinc 5-hydroxyisophthalates	'	
		OSHIO H and	H ICHIDA #	Control of the				
2		Orbital of an Org	anic Bridgin	Control of Intramole	ecular Magnetic Interaction by the Chem., 1995, 99:3294-3302.	e Spin Polarization of d_{π} Spin to p_{π}	+	
	R8	L			1000, 05.0254-5502.	ii -t-ii ea hii		
ı		HOLLEMAN, A.I	F. et al. "Leh	rbych der Angrean	ischen Chemie 101. Auflage"			l
	R9		[]	HIT			17	
-		KEPERT C.I.	nd M I Po	SCEINERY #4				
اكرا		quadruple interp	enetration of	the (10.3)-a netwo	rous chiral framework of coordin ork" Chem. Commun., 1998, 1:31	ated 1,3,5-benzenetricarboxylate:	 	
	R10				John John J. 1990, 1.31	-32.	1 1	
1/		YAGHI, O.M. e	t al. "Cons	truction of Porou	s Solids from Hydrogen Rose	ed Metal Complexes of 1,3,5-	Ш	
	R11	penzenetricarbo	kylic Acid" J.	Am. Chem. Soc.,	is Solids from Hydrogen-Bond 1996, 118:9096-9101.	ou wetai Complexes of 1,3,5-		
~		December 14, 19	a. Selective 195. 378·7∩3	: vinding and remo	oval of guests in a microporous r	metal-organic framework* Nature,	1-1	
_	R12	., .,	, -, -, -, -, -, -, -, -, -, -, -, -,	700.		- Matore,	1 1	

Examiner	7	1-41-1	1.11		
Signature	V	all 1	MIXMIT	Date	9-14
		- XV	4000	Considered	1-01

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending on the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.